

# IF 16x16 MATRIX NON-BLOCKING MAS2814



This matrix will be used to distribute 16 IF signals to 16 receivers in the frequency range 40...200 MHz without any blocking.

## Design

The matrix is housed in a 19" subrack with very good RF shielding and consists of the following sub-assemblies:

- low noise amplifiers with high dynamic range
- power dividers 4-way
- matrix boards 16x4
- processor board
- LAN interface
- manual control module
- redundant power supply units

All the necessary signal, power supply and earthing connections are provided at the rear.

The mains switches are located on the front panel.

## Control

The matrix is controlled via a LAN interface. Other interfaces are possible on request.

## Special features

The power supply voltages and the I/O boards are monitored in a processor routine.

The selected crosspoints as well as the I/O fault messages are displayed on the manual control module.

A status string can also be requested at any time via the control interface.

The unit is constructed using a modular approach utilising 19" plug-in sub-assemblies which enable ease of installation and maintenance.

Technical data		measured a 25° C
Model number:	MAS2814	
Item number:	1400106	
Configuration:	16 inputs, 16 outputs non-blocking	
RF specifications		
Impedance (Ohm):	50	
Frequency range (MHz):	40...200	
Gain (dB):	0+/-2.0	
Gain flatness (dB):	+/-1.0 max.	
Noise figure (dB):	18.0 max.	
VSWR:	1.7 : 1 max.	
Intercept point (dBm):		
3rd order	+20 min.	
2nd order	+30 min.	
Isolation (dB):		
In/in	50 min.	
Out/out	50 min.	
Crosstalk	65 min.	
Switching elements:	solid-state switches non-switched inputs internal terminated	
Further specifications		
Control:	LAN	
Manual control:	LCD (4x20) & pushbuttons (3x6)	
RF connectors:	BNC female	
Power supply (Vac, Hz):	115/230, 47...63, redundant	
Connector	3-pin, with mains filter & fuses with integrated lamp	
Mains switches:		
Temperature range (°C):		
Operating	5...40	
EMC:	in accordance to Eur. standard EN 61000-6-1 & EN 61000-6-3	
Dimensions:		
Height (RU)	3	
Width (inch)	19	
Depth (mm)	about 480 (without connectors & handles)	
Front panel:		
Front view	painted (RAL7032)	

Designed & produced by NOVOTORNIK GmbH

